

Therefore, I Claim:

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A protection and deflection apparatus that is adapted to be mounted in an operating position adjacent to a propeller section of a boat, the propeller section having a propeller blade portion having an axis of rotation and an outer circumferential path of rotation along which tip portions of the propeller blade portion travel, said apparatus having a longitudinal axis, a transverse axis and a vertical axis, said apparatus comprising:

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a) a forwarding deflecting section having a forward central deflecting axis which extends in a downward and rearward slant, and comprising right and left deflection plates, each of which comprises:

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i) a central deflection edge portion, with the two connecting deflection edge portions joining one another at said deflecting axis;

ii) an outer deflection edge portion, with the two outer deflection edge portions each having a forward end and a rear end, and extending laterally outwardly and downwardly from the forward end of the deflection plate;

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iii) a rear deflection section connecting portion;

iv) a generally downwardly and outwardly facing deflection surface, with the two deflection surfaces forming an angle of less than 180 degrees, relative to a plane taken perpendicular to said deflecting alignment axis, so as to extend laterally and upwardly away from one another;

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b) a rear guard section having a rear central guard section axis which is generally longitudinally aligned and is at an angle of less than 180 degrees relative to the deflection axis, a forward end portion connected to the rear end portion of the forward deflecting section and a rear end, said guard section comprising right and left guard plates, each of which comprises:

- i) a central guard plate connecting edge portion with the two central guard plates connecting edge portions meeting each other at the central guard section axis;
- ii) a laterally outward section edge portion having a forward end and a rear end;
- i) a forward guard section connecting portion connected to the rear deflection connecting portion of its related right or left deflection plate;
- ii) a generally downwardly and outwardly facing lower guard surface, with the two guard surfaces forming an angle of less than 180 degrees, relative to a plane taken perpendicular to the guard section axis.

2. The apparatus as recited in claim 1, wherein said apparatus further comprises a mounting section by which said apparatus can be mounted in said operating position.

3. The apparatus as recited in claim 2, wherein said mounting section comprises at least one vertically aligned mounting member adapted to be mounted to a skeg of the propeller section.

4. The apparatus as recited in claim 3, further comprising a backing plate which is adapted to be placed on a side of the skeg opposite to a side on which the mounting member is positioned, with one or more fasteners extending through said mounting member, said backing plate and said skeg.

5. The apparatus as recited in claim 1, wherein forward end portions of the downwardly facing guard surfaces of the two guard plates are aligned and adjacent to rear end portions of the downwardly facing deflection surfaces of the deflection plates.

6. The apparatus as recited in claim 5, wherein forward lower surface edge portions of the guard plates are aligned with and immediately adjacent to rear surface edge portions of the deflection plates in a manner to form a continuous lower surface area of the deflection section and the guide section.

7. The apparatus as recited in claim 6, wherein outer edges of the outer deflection edge portions of the deflection plates meet forward ends of outer edges of the guard plates.

8. The apparatus as recited in claim 1, wherein the angle formed by the two deflection surfaces is no less than about a right angle.

9. The apparatus as recited in claim 8, wherein said angle formed by the deflection surfaces is between about 160 to 100 degrees.

10. The apparatus as recited in claim 1, wherein the angle formed by the two guard surfaces is no less than about two-thirds of a straight angle.

5 11. The apparatus as recited in claim 10, wherein the angle formed by the two guard surfaces is between about 150 to 175 degrees.

10 12. The apparatus as recited in claim 5, wherein the forward end portions of the downwardly facing guard surfaces slant inwardly and forwardly toward one another and form an angle between about 160 and 60 degrees.

15 13. The apparatus as recited in the outer deflection edge portions of the two deflection plates form an angle between about a right angle and about one-sixth of a right angle taken from a view parallel to the longitudinal center axis of the apparatus.

20 14. The apparatus as recited in claim 1, wherein a horizontal plane intersecting the two guard plates at about the longitudinal mid length thereof defines two horizontal lines extending rearwardly and outwardly from the forward central deflecting axis at an angle between about three-quarters of a straight angle and one-half of a right angle.

25 15. The apparatus as recited in claim 1, wherein the angle formed by the central guard section axis relative to the deflection axis is no less than about two-thirds of a straight angle.

16. The apparatus as recited in claim 13, wherein the angle formed by the rear central guard section axis and the deflection axis is between about 160 degrees to about three-quarters of a straight angle.

17. The apparatus as recited in claim 1, wherein the forwarding deflecting section is made with through openings to permit water to flow rearwardly through said deflection section toward a propeller location with the apparatus in its operating position.

18. The apparatus as recited in claim 17, wherein said openings comprise elongate slots having substantial horizontal alignment components and formed in each of said deflection plates.

19. The apparatus as recited in claim 1, wherein the forward deflecting section and the rear guard section are integrally formed from a single piece of sheet metal which is bent along bend lines to form the apparatus, said bend lines being located along said deflecting axis, along said central guard section axis, and along a connecting line between one of the deflection plates and one of the guard plates, with the other deflection plate and the other guard plate being joined together to form a unitary structure comprising the forward deflecting section and the rear guard section.

20. A method of providing protection and deflection for a propeller of a boat, said method comprising:
a) positioning a deflecting section forward of said propeller,

where said deflecting section has a forward central deflecting axis which extends in a downward and rearward slant, and comprising right and left deflection plates, each of which comprises:

- 5 i) a central deflection edge portion, with the two connecting deflection edge portions joining one another at said deflecting axis;
- ii) an outer deflection edge portion, with the two outer deflection edge portions each having a forward end and a rear end, and extending laterally outwardly and
10 downwardly from the forward end of the deflection plate;
- b) utilizing generally downwardly and outwardly facing deflection surfaces of the deflection plates to deflect objects or material from a path of the propeller;
- 15 c) providing a guard section beneath said propeller, said guard section having a central guard section axis which is generally longitudinally aligned and is at an angle of less than 180 degrees relative to the deflection axis, said guard
20 section comprising right and left guard plates, each of which comprises:
- i) a central guard plate connecting edge portion with the two central guard plates connecting edge portions meeting each other at the central guard section axis;
- 25 ii) a laterally outward section edge portion having a forward end and a rear end;

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- iii) a forward guard section connecting portion connected to the rear deflection connecting portion of its related right or left deflection plate;
 - d) utilizing generally downwardly and outwardly facing lower guard surfaces of the guard plates to protect the propeller from engagement with material and/or objects beneath and/or beside sand propeller.

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